

**REMARKS**

The Official Action mailed January 30, 2003 has been received and its contents carefully noted. Filed concurrently herewith is a *Request for Two Month Extension of Time*, which extends the shortened statutory period for response to June 30, 2003. Accordingly, Applicant respectfully submits that this response is being timely filed.

Applicant notes with appreciation the consideration of the Information Disclosure Statement filed on August 24, 2001.

Claims 1-59 were pending in the present application. Claims 1, 4, 22-38, and 40 have been amended and new claims 60-64 have been added to recite additional protection to which Applicant is entitled. Thus, claims 1-64 are now pending in the present application, of which claims 1-6 and 60-61 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance.

The Official Action first objects to the specification asserting that page 5, lines 23-28 are unclear based on the absence of Chemical Formula 1 and Chemical Formula 2. In response, the specification has been amended to insert Chemical Formula 1 and Chemical Formula 2 on page 5 and with these amendments, the objection to the specification is believed to be overcome. It is respectfully submitted that these amendments do not include new matter in that the textual description adequately describes the subject matter illustrated in these chemical formulas. Reconsideration is requested.

The Official Action next objects to claims 22-38, asserting that "transporting layer" should be --hole transporting layer-- in each case. In response, these claims have been amended as suggested by the Examiner to recite --hole transporting layer-- and reconsideration is requested.

The Official Action next objects to the title of the invention as not being descriptive. In response, the title has been amended to recite "Light Emitting Device Comprising Light-Emitting Layer Having Triplet Compound." As amended, it is respectfully submitted that the title of the invention is descriptive and favorable reconsideration is requested.

The Official Action next rejects claims 1, 2, 4, 5, 20, 22, 23, 57, and 58 as obvious based on the combination of U.S. Patent 6,097,147 to Baldo and U.S. Patent

5,457,565 to Namiki. The Official Action further rejects claims 3, 6, 7-19, 21, and 24-56 as obvious based on the combination of Baldo, Namiki, and U.S. Patent 5,928,802 to Shi. For the reasons discussed in detailed below, it is respectfully submitted that the Official Action has failed to establish a *prima facie* case of obviousness and favorable reconsideration is requested.

As stated in MPEP § 2143-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Independent claims 2, 3, 5 and 6 all recite a feature of the present invention that the light emitting device comprises both a first EL element comprising a triplet compound and a second EL element comprising a singlet compound. This feature is also included in independent claims 1 and 4 as amended herewith and in new independent claims 60 and 61 submitted herewith. By this configuration, it is possible to achieve an effect that the luminance of light emitted from the plural EL elements is equalized and a lopsided degradation in which some EL elements degrade faster than other EL elements is prevented (see page 4, lines 19 to 22, for example, of the present specification).

With respect to claim 2, the Official Action contends on page 4 that Namiki discloses in column 3, lines 1-5 a light emitting layer comprised of quinoline derivative such as tris(8-quinolinol)aluminum referred as Alq<sub>3</sub>, which the Official Action asserts is a singlet compound that comprises the second EL element in addition to the first EL element comprising a triplet compound as disclosed by Baldo. It appears that the Official Action asserts that it would have been obvious based on the combination of Baldo and Namiki to employ both a first EL element comprising a triplet compound and a second EL element comprising a singlet compound. It respectfully submitted, however, that the Official Action has failed to provide a sufficient showing that one of skill in the art would have been motivated to combine Baldo and Namiki to achieve the present invention. In fact, there does not appear to be any discussion in the Official Action concerning the motivation to combine the references to achieve this feature.

It is submitted that the burden of showing sufficient motivation to combine references lies with the Office. MPEP § 2142 states "The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness. If, however, the examiner does produce a *prima facie* case, the burden of coming forward with evidence or arguments shifts to the applicant who may submit additional evidence of nonobviousness, such as comparative test data showing that the claimed invention possesses improved properties not expected by the prior art. The initial evaluation of *prima facie* obviousness thus relieves both the examiner and applicant from evaluating evidence beyond the prior art and the evidence in the specification as filed until the art has been shown to suggest the claimed invention."

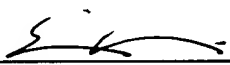
It is respectfully submitted that the Official Action has failed to carry this burden. While the Official Action relies on various teachings of the cited prior art to disclose aspects of the claimed invention and apparently asserts that these aspects could be used together, it is submitted that the Official Action does not adequately set forth why one of skill in the art would combine the references to achieve the present invention. MPEP § 2142 further states: "The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. 'To support the

conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.' *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)."

It is respectfully submitted that there has been an insufficient showing that one of skill in the art would have been motivated to combine Baldo and Namiki to achieve a device as recited in the pending claims having both a first EL element comprising a triplet compound and a second EL element comprising a singlet compound. Reconsideration is requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted,

  
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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

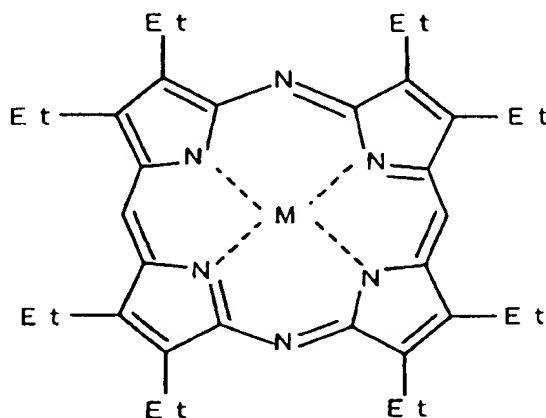
**IN THE TITLE:**

Please change the title of the present invention to read as follows:

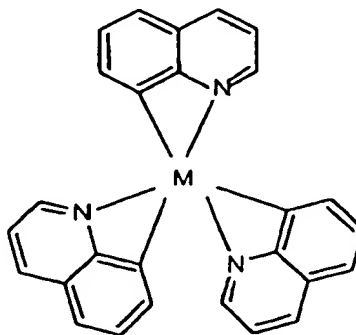
LIGHT EMITTING DEVICE COMPRISING LIGHT-EMITTING LAYER HAVING  
TRIPLET COMPOUND

**IN THE SPECIFICATION:**

Page 5, line 23, after the seventh full paragraph, please insert:



Page 5, line 25, after the seventh full paragraph and after Chemical Formula 1, please insert:



**IN THE CLAIMS:**

1. (Amended) A light emitting device comprising:  
a substrate having a pixel portion; [and  
a plurality of EL elements in the pixel portion, at least one of the EL elements  
comprising an EL layer comprising a triplet compound,  
wherein the EL layer comprises a plurality of hole transporting layers]  
at least one first EL element in the pixel portion, the first EL element comprising a  
first EL layer comprising a triplet compound; and  
at least one second EL element in the pixel portion, the second EL element  
comprising a second EL layer comprising a singlet compound.

4. (Amended) An electric appliance having a light emitting device comprising:  
a substrate having a pixel portion; [and  
a plurality of EL elements in the pixel portion, at least one of the EL elements  
comprising an EL layer comprising a triplet compound,  
wherein the EL layer comprises a plurality of hole transporting layers]  
at least one first EL element in the pixel portion, the first EL element comprising a  
first EL layer comprising a triplet compound; and  
at least one second EL element in the pixel portion, the second EL element  
comprising a second EL layer comprising a singlet compound.

22. (Amended) A light emitting device according to claim 1 wherein the hole  
transporting layer includes one of a layer containing MTDATA and a layer containing  $\alpha$ -  
NPD.

23. (Amended) A light emitting device according to claim 2, wherein the hole  
transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

24. (Amended) A light emitting device according to claim 3, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

25. (Amended) A light emitting device according to claim 8, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

26. (Amended) A light emitting device according to claim 9, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

27. (Amended) A light emitting device according to claim 10, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

28. (Amended) A light emitting device according to claim 11, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

29. (Amended) A light emitting device according to claim 12, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

30. (Amended) A light emitting device according to claim 13, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

31. (Amended) A light emitting device according to claim 14, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

32. (Amended) A light emitting device according to claim 15, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

33. (Amended) A light emitting device according to claim 16, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

34. (Amended) A light emitting device according to claim 17, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

35. (Amended) A light emitting device according to claim 18, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

36. (Amended) A light emitting device according to claim 19, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

37. (Amended) A light emitting device according to claim 20, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.

38. (Amended) A light emitting device according to claim 21, wherein the hole transporting layer includes a layer containing MTDATA and a layer containing  $\alpha$ -NPD.